ABSTRACT

To suppress a noise component caused in conversion of digital data into an ASK modulated signal to be transmitted over a network. Based on a clock CL generated by a clock generation circuit (10), an amplifier (12) produces a clock CL1 having a relatively small amplitude, and an amplifier (14) produces a clock CL2 having a relatively large amplitude. A switching control circuit (20) generates control signals SW relative to switch circuits (16), (18) based on digital data D. The switch circuits (16), (18) selectively send either the clock CL1 or CL2 to an LPF (22) according to the signals SW. The LPF (22) receives a signal which is obtained by connecting rectangular waves having different amplitudes. The LPF (22) smoothes the received signal to thereby produce an ASK modulated signal which is a succession of sinusoidal waveforms.